

CSIAC Success Story

CSIAC and AgentFly Technologies Autonomous UAS Experimentation System (AUES) CSIAC.org

Customer:	AFRL/RI – Air Force Research Laboratory Information Directorate
Challenge:	To ensure air safety with the growing use of RPVs (Remotely Piloted Vehicles) through the integration of advanced capabilities into UAV autopilot systems.
Approach:	Use software agents for large scale simulation of civilian and unmanned air traffic while increasing autonomy using tailored onboard processing in distributed architectures. CSIAC partnered with Czech-based AgentFly Technologies to integrate advanced flight path planning, decentralized collision avoidance with highly detailed models. Lockheed Martin Desert Hawk IIIs equipped with AgentFly C2 software will be flown by NUAIR at the Griffiss FAA UAS Test Sites to demonstrate the approach.
Value:	CSIAC is providing the DoD a TRL level 6 capability that is part of a Modeling and Simulation tool currently being funded by FAA to model the national airspace. By integrating a Lockheed Martin Desert Hawk III hardware suite with AgentFly's UAS autonomous C2 capability and FAA-validated M&S tool, AFRL will be able to provide mission planning, rehearsal and review for autonomous UAVs. This will provide a much higher probability of successfully integrating new C4ISR technologies into the increasingly complex autonomous aerial systems planned by the USAF.

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